

CLAIMS

1. A method for automated acquisition of assertions in a specification of a computer program, comprising the operations of:

receiving an input specification, wherein the input specification comprises a
5 plurality of sentences;

obtaining a sentence from the plurality of sentences;

determining whether the obtained sentence is a testable assertion; and

marking the obtained sentence as testable when the obtained sentence is a testable
assertion.

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2. A method as recited in claim 1, further comprising the operation of identifying a context within the specification.

3. A method as recited in claim 2, wherein the operation of obtaining the
15 sentence from the plurality of sentences includes parsing the context to obtain the sentence.

4. A method as recited in claim 3, further comprising the operation of adding the marked obtained sentence to an assertion result set.

5. A method as recited in claim 4, wherein the context is a set of circumstances related to the obtained sentence.

5 6. A method as recited in claim 5, wherein each assertion comprises at least one sentence of the specification.

7. A method as recited in claim 9, wherein each assertion can comprises at least two sentences of the specification.

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8. A computer program for automatically obtaining assertions from a specification for a computer program, comprising:

a code segment that receives an input specification for a computer program;

a code segment that identifies a context within the input specification;

15 a code segment that parses the identified context to obtain assertions;

a code segment that determines whether the obtained assertions are testable statements; and

a code segment that adds the obtained assertions to an assertion result set, wherein the assertion result set can be used to facilitate testing of the specification.

9. A computer program as recited in claim 8, further comprising a code segment that filters the identified context prior to parsing the context.

5 10. A computer program as recited in claim 9, wherein an assertion is an implied statement that can be tested.

11. A computer program as recited in claim 9, wherein the context is a set of circumstances related to the obtained assertions.

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12. A computer program as recited in claim 9, wherein each assertion comprises at least one sentence of the specification.

13. A computer program as recited in claim 9, wherein each assertion can
15 comprises at least two sentences of the specification.

14. A computer program for automated acquisition of assertions in a specification of a computer program, comprising:

a code segment that receives an input specification, wherein the input specification comprises a plurality of sentences;

a code segment that obtains a sentence from the plurality of sentences;

a code segment that determines whether the obtained sentence is a testable
5 assertion; and

a code segment that marks the obtained sentence as testable when the obtained sentence is a testable assertion.

15. A computer program as recited in claim 14, further comprising a code
10 segment that identifies a context within the specification.

16. A computer program as recited in claim 15, wherein the code segment that obtains the sentence from the plurality of sentences includes a code segment that parses the context to obtain the sentence.

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17. A computer program as recited in claim 16, further comprising a code segment that adds the marked obtained sentence to an assertion result set.

18. A computer program as recited in claim 17, wherein the context is a set of
20 circumstances related to the obtained sentence.

19. A computer program as recited in claim 18, wherein each assertion comprises at least one sentence of the specification.

5 20. A computer program as recited in claim 19, wherein each assertion can comprises at least two sentences of the specification.

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